

REMARKS

This responds to the Office Action mailed on September 20, 2006.

No claims are amended, no claims are canceled, and claims 65 and 66 are added; as a result, claims 1-9, 27-33, and 59-66 are now pending in this application. The amendments to the claims are fully supported by the specification as originally filed. No new matter is introduced. Applicant respectfully requests reconsideration of the above-identified application in view of the amendments above and the remarks that follow.

Support for claims 65 and 66 may be found in the specification, for example, on page 11, lines 7-8.

§102 Rejection of the Claims

Claims 1, 27, 28, and 30-33 were rejected under 35 U.S.C. § 102(e) for anticipation by Nguyen et al. (U.S. 6,245,595). Applicant respectfully traverses the rejection of these claims for the reasons stated below.

Applicant reserves the right to swear behind Nguyen '595 at a later date.

To sustain a rejection under 35 U.S.C. § 102(e), a prior art reference proposed in the Office Action must teach every element of the claim, i.e. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

Applicant cannot find in Nguyen '595 a disclosure, a teaching, or a suggestion of a method of packaging that discloses **forming an array of conductive elements within the adhesive to a level to allow the adhesive to contact a support to attach the at least one die to the support.....**", as recited in claim 1. Referring to Figures 3, 5 and 6 of Nguyen '595 relied upon by the Office Action, it can be seen that the solder bumps 108 are formed on the wafer prior to the injection of the underfill encapsulant 210, that is, the alleged adhesive of Nguyen '595 is applied to the solder bumps. However, in claim 1 of the application, an array of conductive elements is formed within the adhesive. Thus, the order of the relevant processes in the method of Nguyen '595 is different from that of claim 1 of the application. Therefore, for at least this reason, Applicant submits that Nguyen '595 does not teach or suggest all the elements

as arranged in claim 1, and that Nguyen '595 does not anticipate claim 1. Accordingly, Applicant submits that claim 1 is patentable over Nguyen '595.

For at least reasons similar to those stated above with respect to claim 1, Applicant submits that claim 27 is patentable over Nguyen '595. Claims 28 and 30-33, directly or indirectly, depend on claim 27. Thus, Applicant submits that claims 28 and 30-33 are patentable over Nguyen '595 for at least the reasons discussed herein.

Applicant respectfully requests withdrawal of these rejections of claims 1, 27, 28, and 30-33, and reconsideration and allowance of these claims.

First §103 Rejection of the Claims

Claims 2-4, 6-9, 29 and 59-64 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen et al. (U.S. 6,245,595) in combination with Nguyen (U.S. 6,352,881). Applicant respectfully traverses the rejection of these claims.

Applicant reserves the right to swear behind Nguyen '881 at a later date.

To retain a rejection to a claim under §103(a), the prior art reference (or references when combined) must teach or suggest all the claim limitations, and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

For at least the reasons discussed above with respect to claims 1 and 27, Applicant submits that independent claims 4 and 59 are patentable over Nguyen '595.

Applicant submits that the proffered combination of Nguyen '595 and Nguyen '881 is not proper. In the Office Action, it is stated that "both methods and its product produce equivalent structures ... it would have been obvious to one of ordinary skill in the art to substitute the method of forming holes in an adhesive instead of covering conductive elements with an adhesive to produce an encapsulated wafer with exposed contacts." Applicant disagrees. In considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. *M.P.E.P.* § 2144.01 (citing *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968)). However, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion

or motivation to make the proposed modification. *M.P.E.P.* § 2143.01 (citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)). Nguyen '595 uses an injection method that is distinctly differs from the method of Nguyen '881. Applicant submits that the proposed combination would effectively remove the teachings of Nguyen '595 as applied in the Office Action. Therefore, Applicant submits that the independent claims of the instant application are patentable over Nguyen '595 in view of Nguyen '881, as proffered in the Office Action.

For at least the reasons stated above with respect to the independent claims, Applicant submits that the dependent claims of the instant application are patentable over Nguyen '595 in view of Nguyen '881.

Applicant respectfully requests withdrawal of these rejection of claims 2-4, 6-9, 29 and 59-64, and reconsideration and allowance of these claims.

Second §103 Rejection of the Claims

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen et al. (U.S. 6,245,595) and Nguyen (U.S. 6,352,881) as applied to claim 4 and further in combination with Kim et al (U.S. 6,903, 451). Applicant respectfully traverses the rejection of these claims.

Applicant reserves the right to swear behind Kim '451 at a later date.

In the Office Action, Kim '451 is cited with respect to applying a protective coating to a second side of a wafer. Applicant submits that Kim '451 in combination with Nguyen '595 and Nguyen '881 does not cure the deficiencies of citing Nguyen '595 and Nguyen '881 to claim 4. Therefore, Applicant submits that claim 4 is patentable over Nguyen '595 and Nguyen '881 in combination with Kim '451. Claim 5 depends from claim 4. Thus, for at least the reasons stated herein, Applicant submits that claim 5 is patentable over Nguyen '595 and Nguyen '881 in combination with Kim '451.

Applicant respectfully requests withdrawal of these rejections of claim 5, and reconsideration and allowance of this claim.

New Claims

New claims 65 and 66 depend from patentable claims 4 and 59, respectively. Applicant respectfully requests consideration and allowance of claims 65 and 66.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 371-2157 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date

20 December 2006

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 20 day of December 2006.

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